

# **The Retinal Toxicity Profile towards Assemblies of Amyloid- $\beta$ Indicate the Predominant Pathophysiological Activity of Oligomeric Species**

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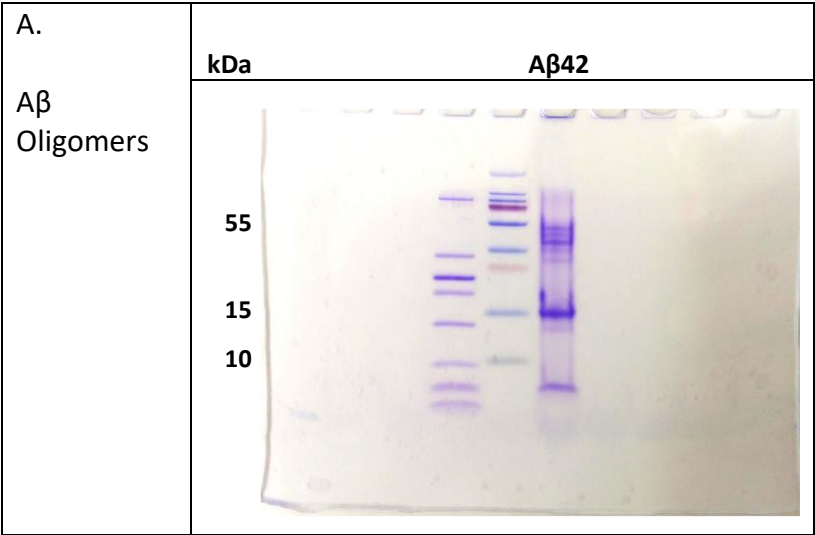
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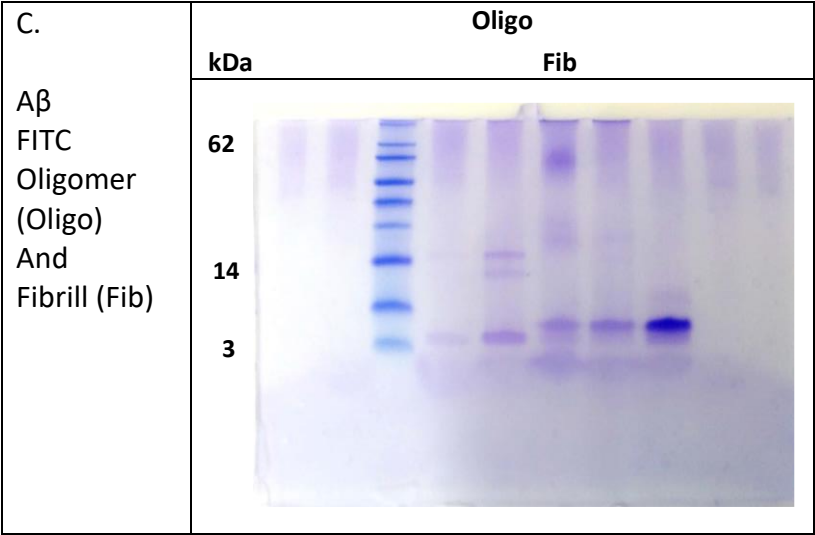
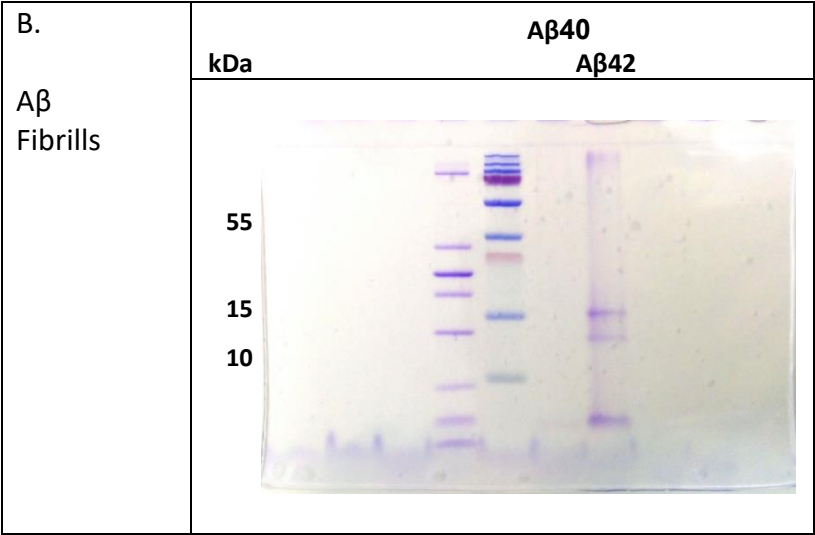
All authors have declared no conflict of interest.

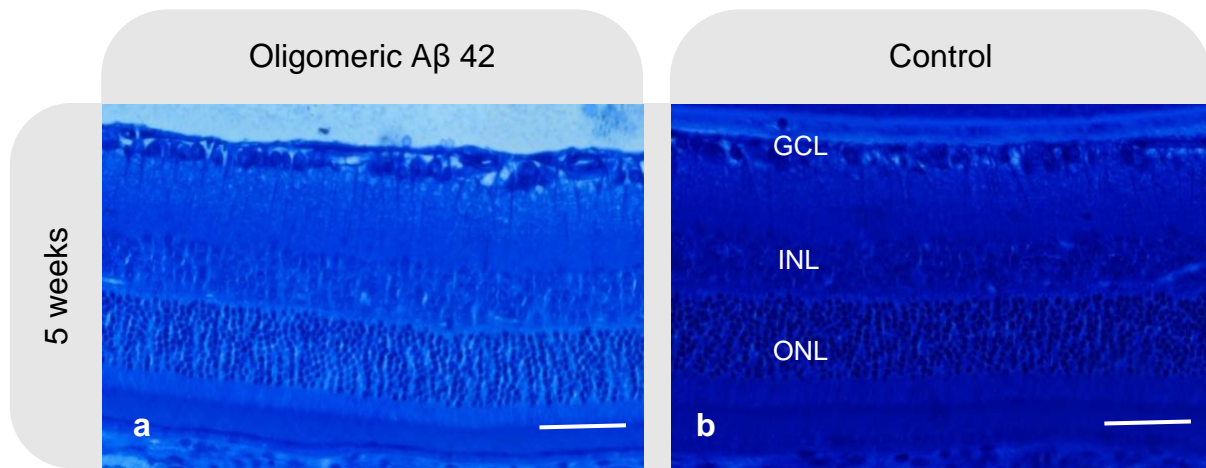
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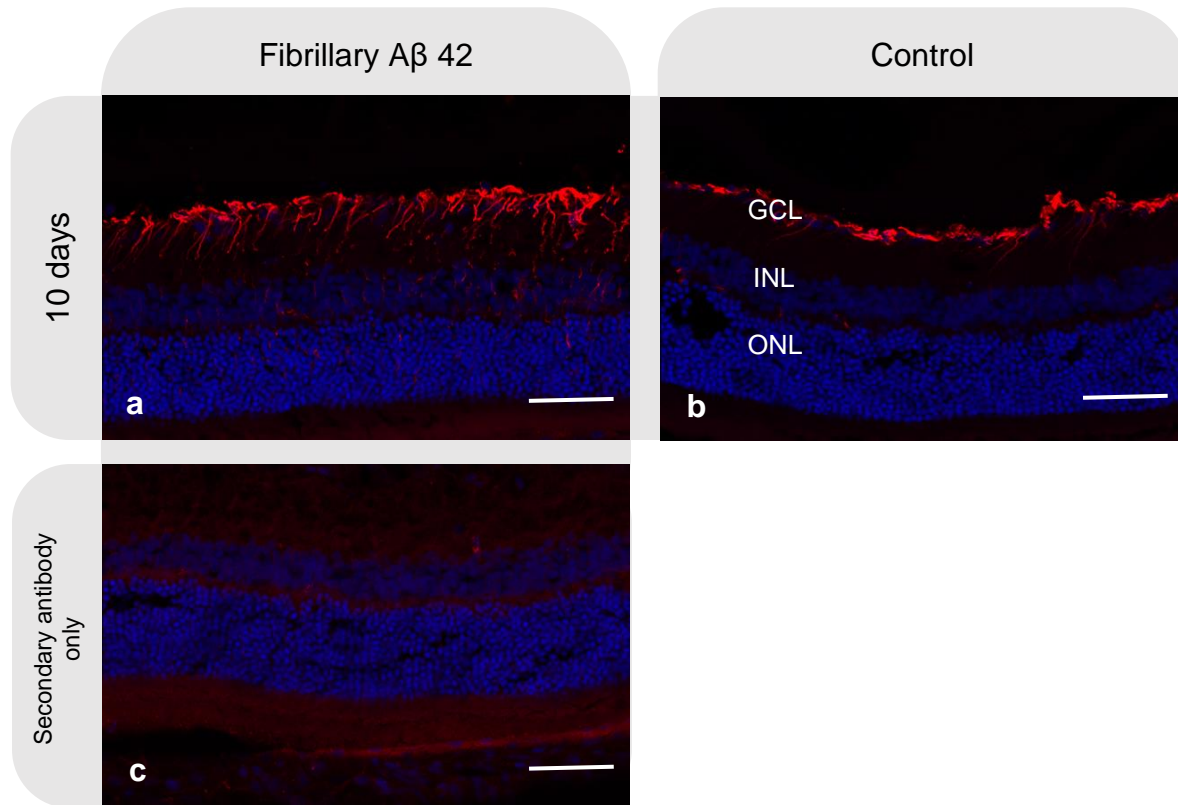


**Figure S1.** Full-length Gel electrophoresis for (A) oligomeric A $\beta$ 42, (B) fibrillar A $\beta$ 40 and A $\beta$ 42, and (C) oligomeric and fibrillar FITC-A $\beta$ 42 assemblies.





**Figure S2. Histology of retina from a rat treated with intravitreal oligomeric A $\beta$ 42.** Light photomicrographs of central retina stained with Methylene blue showing no differences in retinal layers' thickness between study (a) and control (b) eyes 5 weeks after intravitreal injection. Results were replicated in four rats in each subgroup. Scale bars: 50  $\mu$ m.



**Figure S3. Immunostaining for glial fibrillary acidic protein (GFAP) in retinas of a rat treated with intravitreal fibrillary Aβ42.** Retinal sections from the peripheral retina in the experimental eye (a) show significant GFAP staining of cells with a typical morphology for Müller cells. (b) Peripheral retinal areas from the control eye demonstrate no labelling of Müller cells. (Red- GFAP, Blue- DAPI staining of all nuclei). (c) As a control, sections from experimental eyes were stained with secondary antibody only. To obtain this data 16-μm tissue sections at five different tissue planes (100 μm apart) were prepared and stained. Results were replicated in four rats in each subgroup. Scale bars: 50 μm.